

WHAT IS CLAIMED IS:

1. An automatic authentication method in a print process that requires user authentication, comprising the steps of:

5 extracting information related to an application and/or a document for the print process as attribute information; and

executing user authentication based on the attribute information.

10 2. The method according to claim 1, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document
15 creator/updater, password, create/update date, which are associated with a document print process.

3. The method according to claim 1, further comprising the step of executing, when user authentication has succeeded and a print process is
20 executed, an accounting process of expendables associated with the document print process for each user or each department of a group to which the user belongs.

4. The method according to claim 1, wherein the
25 attribute information contains various kinds of application attribute information including at least one of an application name, application user,

affiliation of the application user, password, use date, which are associated with the application used.

5. The method according to claim 1, further comprising the step of executing, when user

5 authentication has succeeded and a print process is executed, an accounting process associated with use of the application for each user or each department of a group to which the user belongs.

6. The method according to claim 1, wherein user
10 authentication is executed by comparing an ID and password found based on the attribute information, and an ID and password that a user inputs to a printer.

7. An automatic authentication system in a print process that requires user authentication, comprising:

15 means of extracting information related to an application and/or a document for the print process as attribute information; and

means of executing user authentication based on the attribute information.

20 8. The system according to claim 7, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document
25 creator/updater, password, create/update date, which are associated with a document print process.

9. The system according to claim 7, wherein said automatic authentication system comprises a client computer or print server which is installed with a printer driver, a server for managing a network, and a printer for executing the print process, which are connected via a network, and

said extraction means is included in the printer driver, and said user authentication means is included in the server.

10. The system according to claim 7, further comprising means of, when user authentication has succeeded and a print process is executed, executing an accounting process of expendables associated with the document print process for each user or each department of a group to which the user belongs.

11. The system according to claim 7, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, affiliation of the application user, password, use date, which are associated with the application used.

12. The system according to claim 7, further comprising means of, when user authentication has succeeded and a print process is executed, executing an accounting process associated with use of the application for each user or each department of a group to which the user belongs.

13. The system according to claim 7, wherein said automatic authentication system comprises a client computer or print server which is installed with a printer driver, and a printer for executing the print process, which are connected via a network, and

said extraction means is included in the printer driver, and said user authentication means is included in the printer.

14. The system according to claim 7, wherein said user authentication means compares an ID and password found based on the attribute information, and an ID and password that a user inputs to a printer.

15. A printer driver in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information related to an application and/or a document for the print process as attribute information;

means of extracting information required for user authentication from the attribute information;

means of sending a user authentication request appended with the extracted information to a server via a network; and

means of, when user authentication has succeeded, controlling a printer to execute the print process.

16. A printer driver in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information related to an application and/or a document for the print process as attribute information;

means of extracting information required for user authentication from the attribute information; and

means of sending print information appended with the extracted information to a printer.

17. A server in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information, which is required for user authentication and is extracted from attribute information related to an application and/or a document for the print process, from a printer driver via a network;

means of checking a user authentication result by comparing the extracted information with user authentication information which is registered in advance; and

means of returning the user authentication result to the printer driver via the network.

18. The server according to claim 17, wherein the user authentication information which is registered in

advance contains related information of a user and a department of a group to which the user belongs, and

5 said server further comprises means of, when user authentication has succeeded and a print process is executed, executing an accounting process of expendables associated with the document print process for each user or each department of the group to which the user belongs.

10 19. The server according to claim 17, wherein the user authentication information which is registered in advance contains related information of a user and a department of a group to which the user belongs, and

15 said server further comprises means of, when user authentication has succeeded and a print process is executed, executing an accounting process associated with use of the application for each user or each department of the group to which the user belongs.

20 20. The server according to claim 17, further comprising:

20 means of registering and holding various kinds of attribute information of departments, affiliations, individuals, print accounting states, associated with clients, users, and groups who make a document print process; and

25 means of updating use states of a printer used in a print process for respective departments, affiliations, and individuals.

21. The server according to claim 20, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document creator/updater, password, create/update date, which are sent from a print server or client and are associated with a document print process, and

said checking means comprises means of executing department authentication of a user, group, affiliation, or the like by comparing a document creator/updater, affiliation of the document creator/updater, and password registered in said server on the basis of the various kinds of document attribute information.

22. The server according to claim 17, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, affiliation of the application user, password, use date, which are associated with the application used, and

said checking means comprises means of granting permission of use of the application on the basis of the application attribute information.

23. A printer in an automatic authentication system which executes a print process that requires user authentication, comprising:

means of receiving information, which is required
for user authentication and is extracted from attribute
information related to an application and/or a document
for the print process, from a printer driver together
5 with print information;

means of inputting user authentication
information; and

means of executing user authentication on the
basis of a comparison result of the information
10 required for user authentication and the input
information.

24. A storage medium which computer-readably stores a
printer driver in an automatic authentication system
which executes a print process that requires user
15 authentication,

said printer driver comprising the steps of:

receiving information related to an application
and/or a document for the print process as attribute
information;

20 extracting information required for user
authentication from the attribute information;

sending a user authentication request appended
with the extracted information to a server via a
network; and

25 controlling, when user authentication has
succeeded, a printer to execute the print process.

25. A storage medium which computer-readably stores a printer driver in an automatic authentication system which executes a print process that requires user authentication,

5 said printer driver comprising the steps of:
 receiving information related to an application and/or a document for the print process as attribute information;

 extracting information required for user
10 authentication from the attribute information; and
 sending print information appended with the extracted information to a printer.

26. A storage medium which computer-readably stores a control program for controlling a printer in an
15 automatic authentication system which executes a print process that requires user authentication,

 said control program comprising the steps of:
 receiving information, which is required for user authentication and is extracted from attribute
20 information related to an application and/or a document for the print process, from a printer driver together with print information;

 inputting user authentication information; and
 executing user authentication on the basis of a
25 comparison result of the information required for user authentication and the input information.

31. The apparatus according to claim 30, wherein said API is provided in the printer driver module.

32. The apparatus according to claim 30, wherein said extracting means calls said API in response to a print

5 instructor inputted from the application.

[illegible]